

The development of factory monitoring in high radio frequency interference using Arduino

Abstract

The objective of this documentation is to detect and monitor the Radio Frequency Interference (RFI) or Electromagnetic Interference (EMI) by using the specific module and system that will fully complied with detailed explanations on engineering aspect regarding the knowledge gained and valuable experiences that I have learned during this proposal period. The mechanism used in this system is the module of Arduino Mega 2560 that act as the main platform for acquiring RFI from the specific sensor and will convey the signal into information that will link to the Programmable Logic Controller (PLC) in the certain way and method of communication through all of the devices. In order to show the supportive toward the Industrial Revolution 4.0 the system is integrated by IOT gateway device that will monitor the data in term of cloud-based using the SIMATIC IOT 2000 as the data storage flatform.